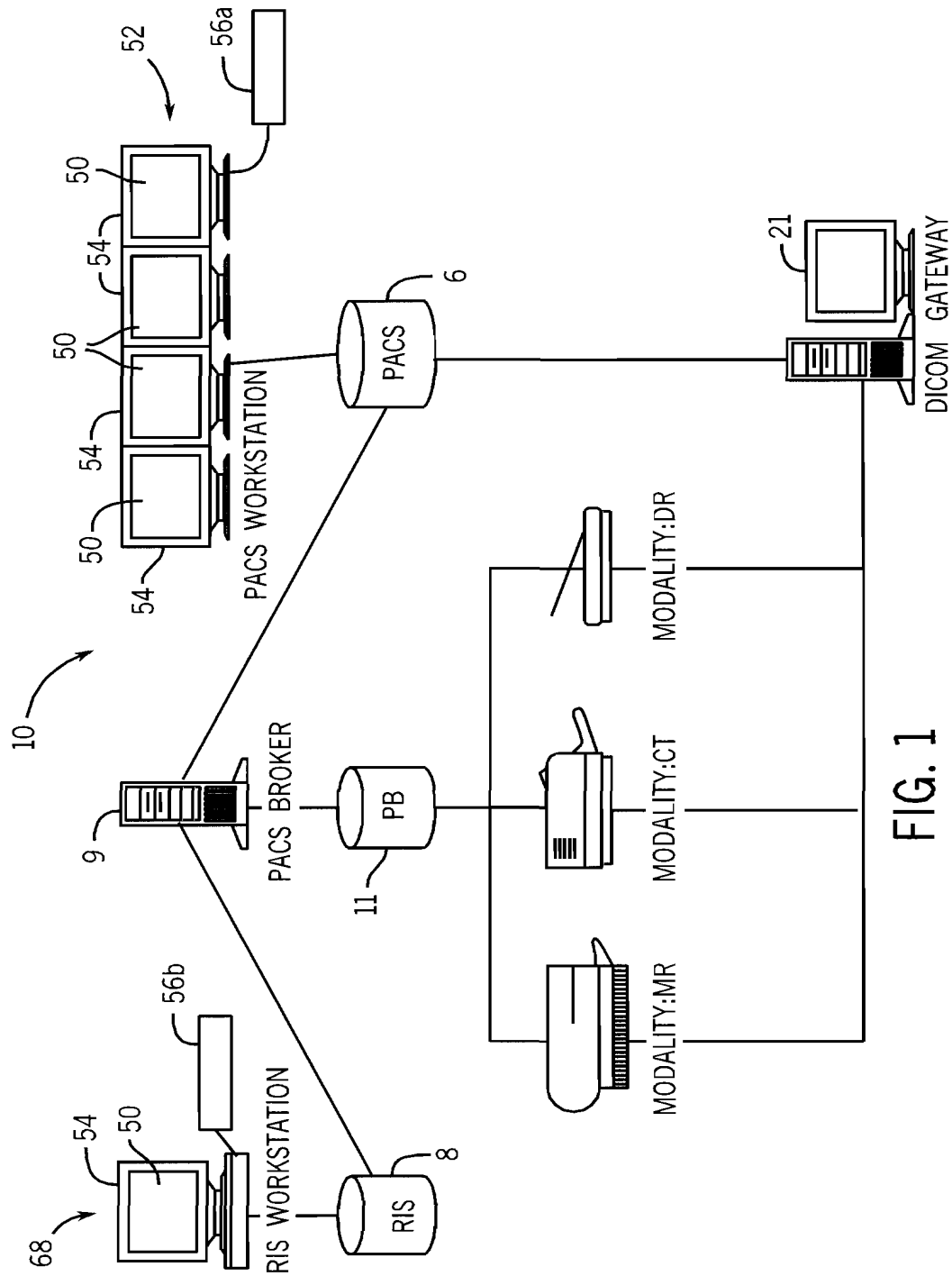


1 / 7



2 / 7

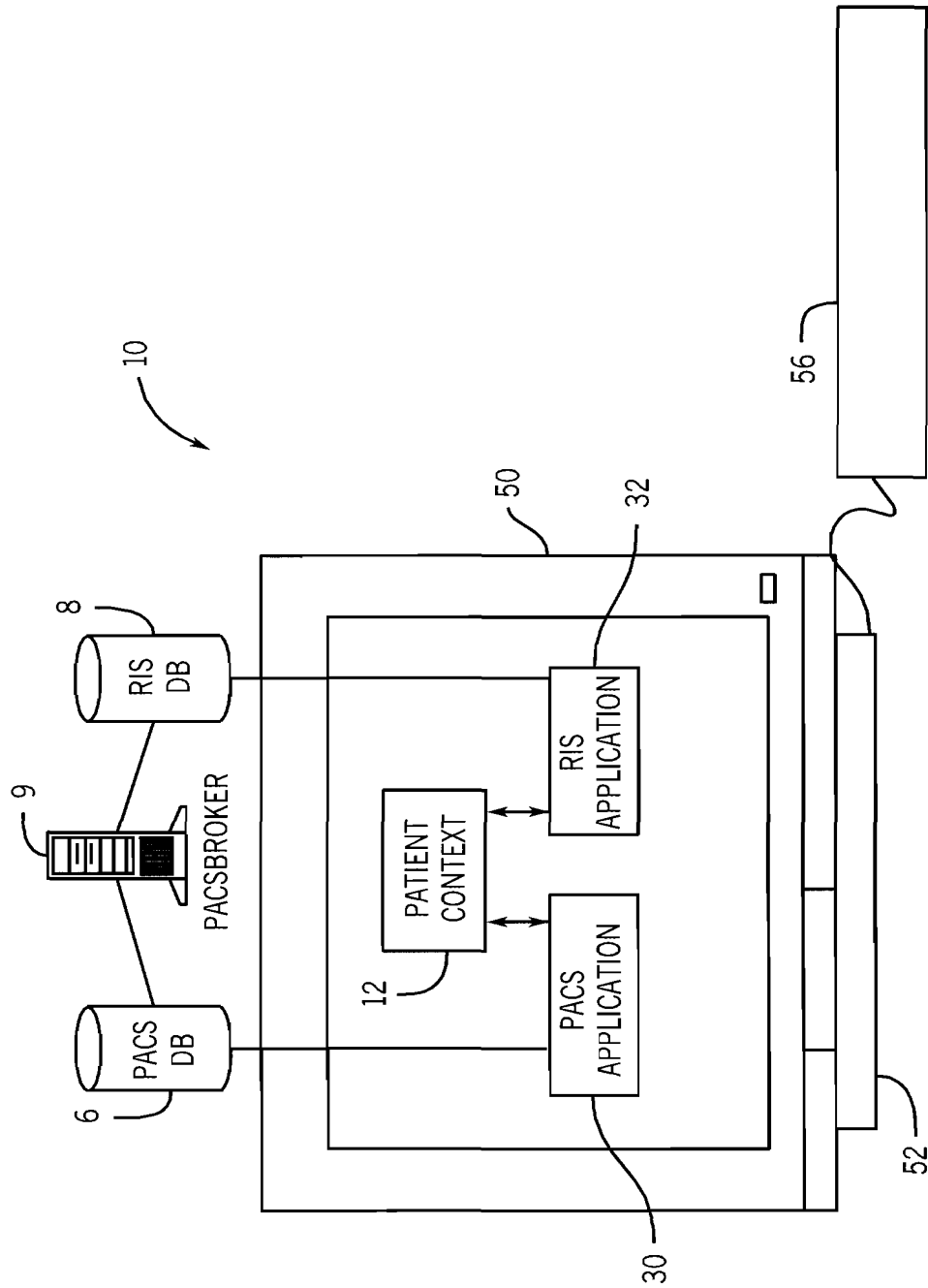


FIG. 2

3 / 7

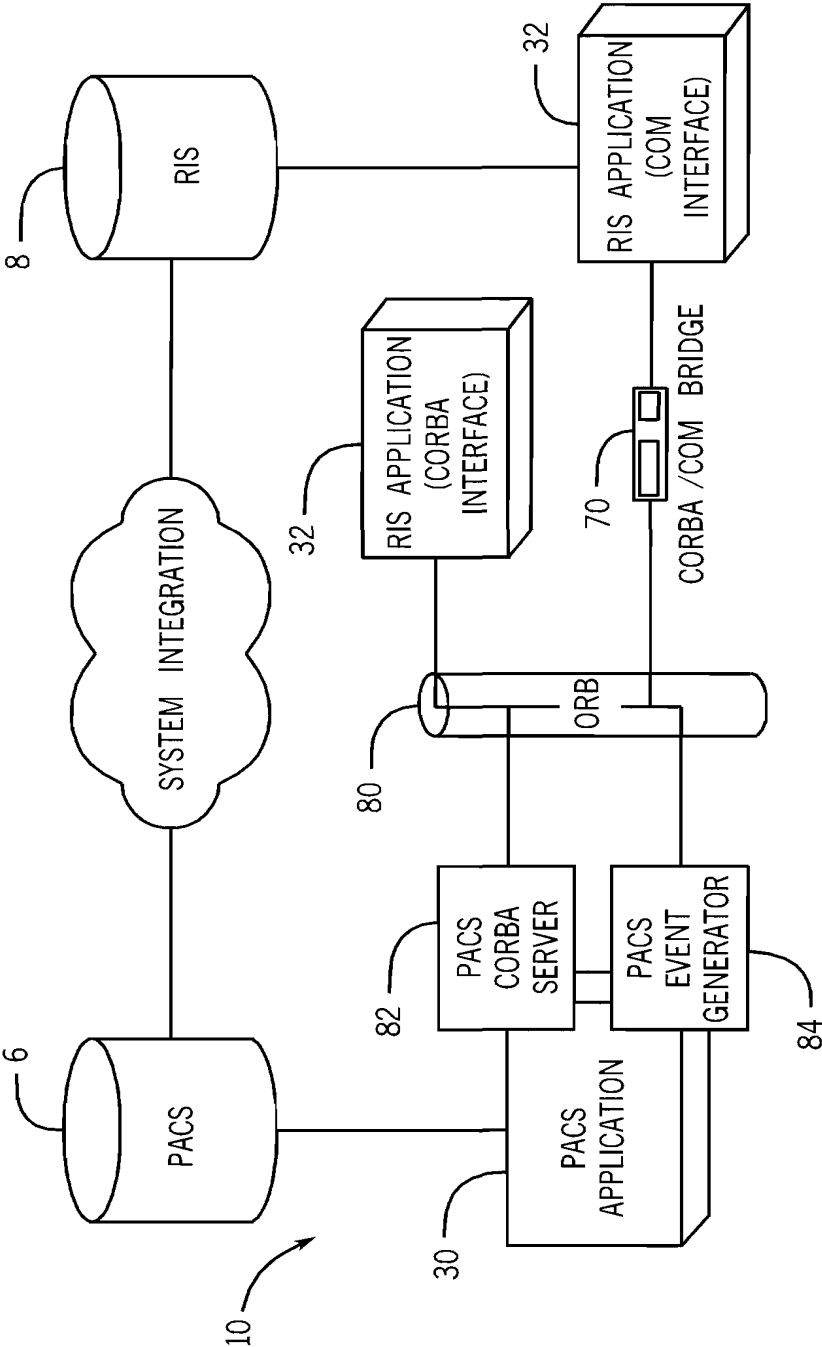


FIG. 3

FIG. 4

```
graph TD
    subgraph PACS_APPLICATION [PACS APPLICATION]
        RI1[PACS] --> PC1[Patient Context Creation]
        PC1 --> EG1[Event Generation]
    end
    EG1 --> TOR[Transport on the ORB]
    subgraph CORBA_SERVICES [CORBA SERVICES]
        TOR --> PAA1[Patient Context Analysis]
        TOR --> PAA2[Patient Context Analysis]
        TOR --> PAA3[Pathspeed Action Requested]
    end
    PAA1 --> PI1[Patient Information]
    PAA2 --> PI2[Patient Information]
    PAA3 --> PAA4[Pathspeed Action Requested]
    PAA4 --> RI2[PACS]
    PAA4 --> PAA5[Pathspeed Action Requested Analysis]
    PAA5 --> PI3[Patient Information]
    subgraph PACS_BRIDGE [PACS BRIDGE]
        PAA5 --> PAA6[Pathspeed Action Requested Analysis]
    end
    PAA6 --> PI3
    subgraph RIS_APPLICATION [RIS APPLICATION]
        RI2 --> PAA4
    end
```

The flowchart illustrates the PACS application architecture, showing the flow of data and control between various components. The architecture is divided into four main layers: PACS APPLICATION, CORBA SERVICES, PACS BRIDGE, and RIS APPLICATION.

- PACS APPLICATION:** This layer includes the initial input and processing steps. It starts with **RADIOLOGIST INPUT-PACS** (52), which leads to **PATIENT CONTEXT CREATION** (12). This step then leads to **EVENT GENERATION** (84).
- CORBA SERVICES:** This layer handles the transport and analysis of data. It includes **TRANSPORT ON THE ORB** (80), which receives input from **EVENT GENERATION** (84). This component then branches into three paths: **PATIENT CONTEXT ANALYSIS** (14), **PATIENT CONTEXT ANALYSIS** (14), and **PATHSPEED ACTION REQUESTED ANALYSIS** (80).
- PACS BRIDGE:** This layer acts as a bridge between the PACS and RIS applications. It includes **COM / CORBA TRANSLATION** (70), which receives input from **TRANSPORT ON THE ORB** (80). This component then branches into two paths: **PATIENT CONTEXT ANALYSIS** (14) and **PATIENT CONTEXT ANALYSIS** (14).
- RIS APPLICATION:** This layer includes the final output and processing steps. It starts with **RADIOLOGIST INPUT-PACS** (68), which leads to **PATHSPEED ACTION REQUESTED** (68). This step then leads to **PATHSPEED ACTION REQUESTED ANALYSIS** (80), which finally leads to **PATIENT INFORMATION** (14).

The flowchart also includes several decision points (diamonds) and a loop structure. A decision point labeled **CORBA - COM ?** (14) is located between **TRANSPORT ON THE ORB** (80) and **PATIENT CONTEXT ANALYSIS** (14). Another decision point labeled **CORBA - COM ?** (14) is located between **PATHSPEED ACTION REQUESTED** (68) and **PATHSPEED ACTION REQUESTED ANALYSIS** (80). A loop structure is shown with the label **CORBA** (14) and **COM** (14).

5 / 7

54

PATIENT NAME	PAT.ID	PROCEDURE	IMG#	STUDY TIME
NAME 1	1096	SM BOWEL	30	1995.09.29
NAME 2	1096	SWALLOW STUDY	3	1995.09.29
NAME 3	1098	CT HEAD	28	1997.11.21
NAME 4	1098	CT HEAD	25	1997.11.21
NAME 5	1098	CT HEAD	25	1997.12.10
NAME 6	1098	CT HEAD	25	1997.11.26

18

30

PACS APPLICATION

32

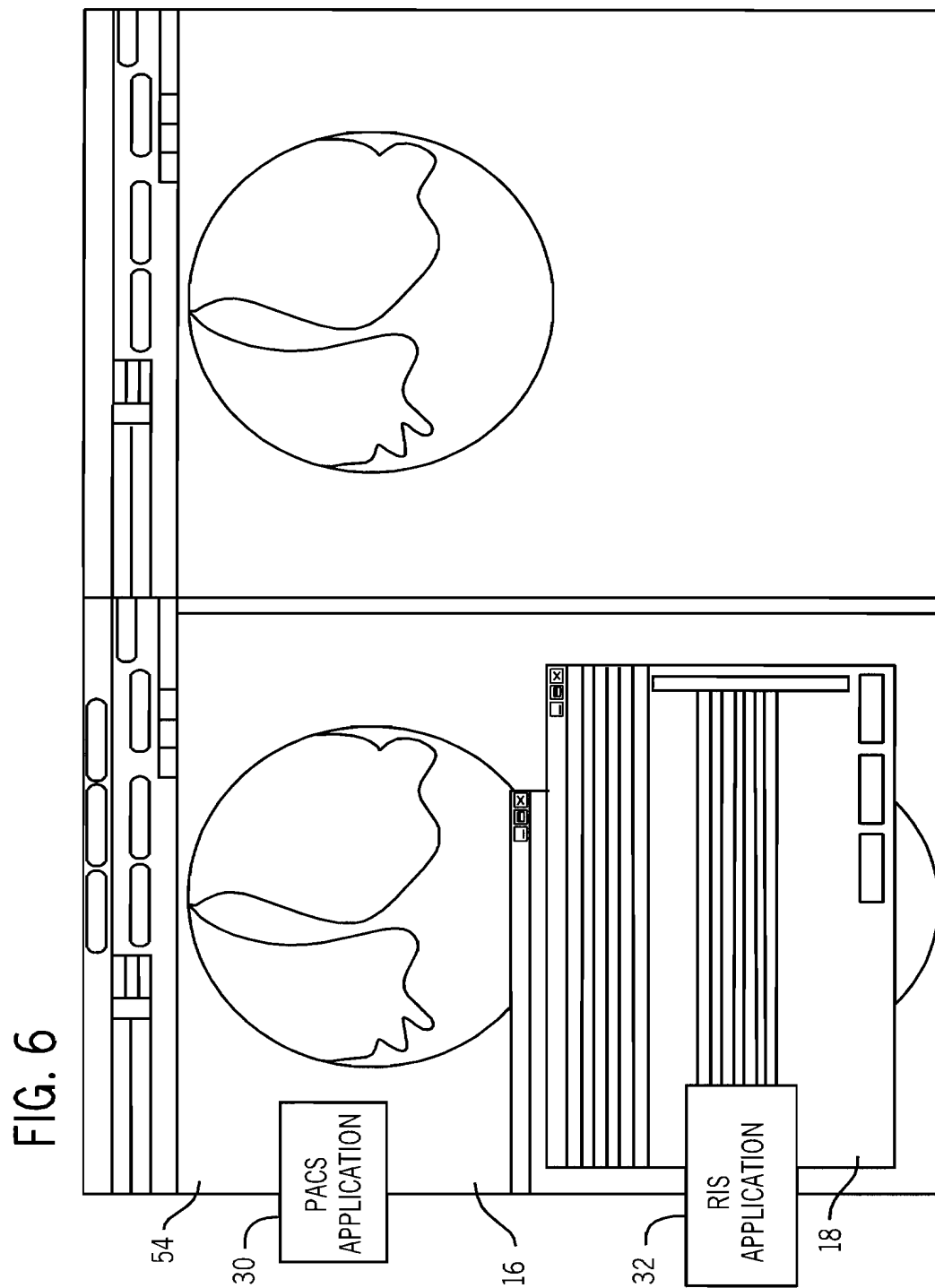
RIS APPLICATION

PATIENT NAME DATE OF BIRTH
GENDER AGE

STUDY TIME: 02:05:15.8500
STUDY DATE & TIME: 1995.09.29:02
LONG-TERM STORAGE
(ARCHIVE) STATUS CODE
SHORT-TERM STORAGE
STATUS CODE:

FIG. 5

6 / 7



7 / 7

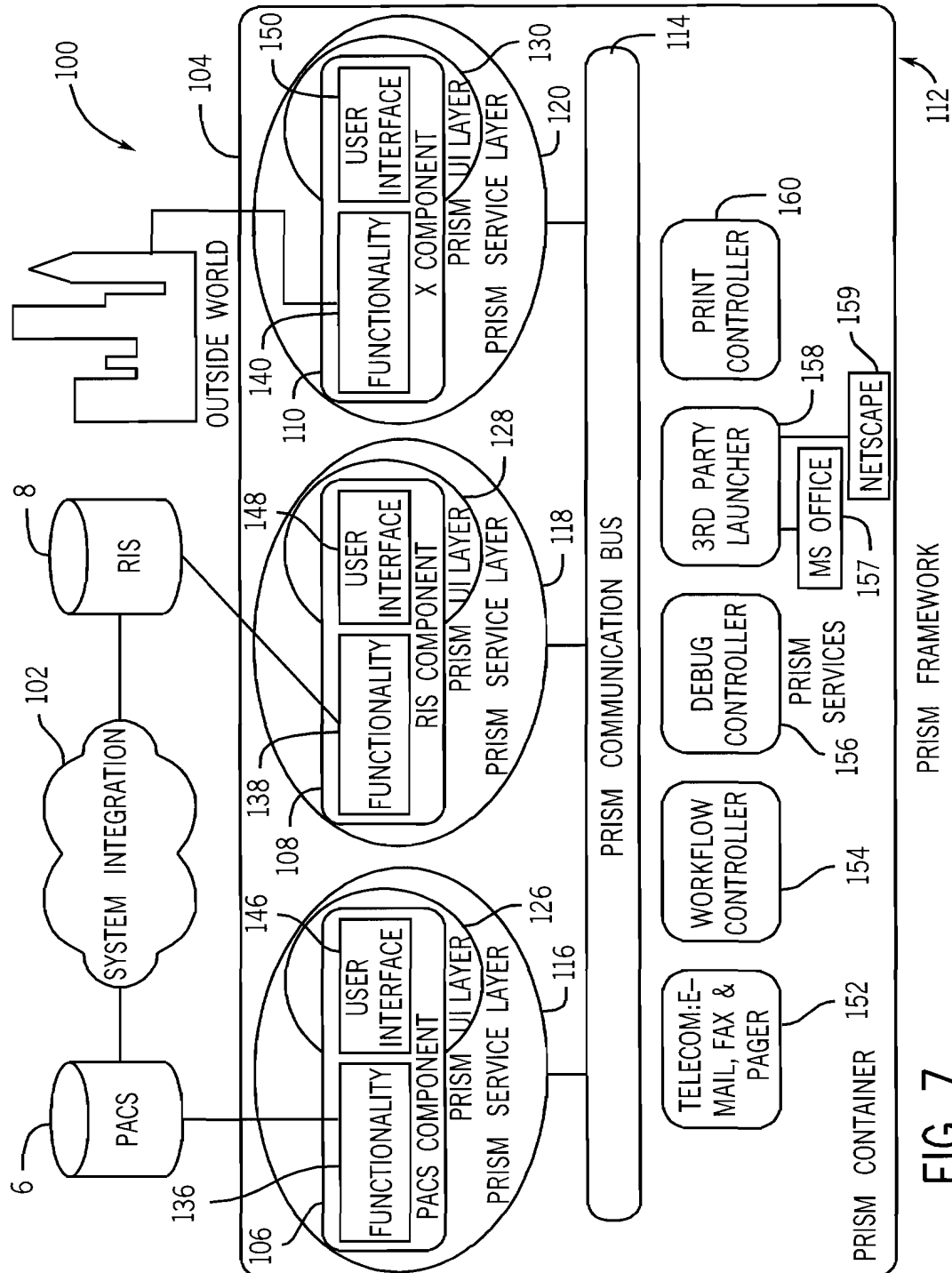


FIG. 7